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QOLP-15. SAFETY AND ADVERSE EVENT PROFILE OF TUMOR TREATING FIELDS IN ANAPLASTIC GLIOMA A POST-MARKETING SURVEILLANCE ANALYSIS

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needs. Additional prospective study is needed to determine the role of this clinic in neuro-oncologic care.

QOLP-13. PSYCHOSOCIAL DISTRESS IN PATIENTS WITH RECURRENT MENINGIOMAS

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INTRODUCTION: Meningiomas, the most common CNS neoplasm, are often deemed less threatening than their glial counterparts. Unfortunately, these tumors recur and necessitate surgery, radiation, and/or systemic treatment. We explored the psychosocial distress of patients with recurrent meningioma using The National Comprehensive Cancer Network Distress Thermometer (NCCN-DT) and Problem List. **METHODS:** This was a retrospective analysis of patients with recurrent meningioma seen at the Preston Robert Tisch Brain Tumor Center between 12/31/2004–10/10/2018 who completed a NCCN-DT and Problem List. The first or only NCCN-DT assessment after initial recurrence was used for analysis with a score of 4 indicating moderate to severe distress. **RESULTS:** 45 patients were identified, 56% female, median age was 61 years and 58% had unifocal disease. 60% were Grade I, 33% Grade II, 4% Grade III, and 2% indeterminate recurrent meningioma. The median NCCN-DT score was 3, and 49% had a NCCN-DT score 4 indicating moderate to severe distress. 64% of females vs 30% of males reported distress scores 4 ($p=0.04$). 65% of patients with unifocal disease reported 4 scores compared to 26% with multifocal disease ($p=0.02$). Fatigue ($N=24$), Worry ($N=23$), Nervousness ($N=22$), Depression ($N=19$) and Memory/Concentration ($N=19$) were the most commonly reported problems. A higher incidence of worry among females (64%) than males (35%) was the only problem showing a trend towards significance ($p=0.08$). Between initial recurrence and NCCN assessment, the type and number of treatments patients received included: surgery (median=1, range 0–5), radiation (median=2, range 0–5), systemic treatment (median=2, range 0–12). There was no association between distress and the number of surgeries ($p=0.99$), radiation treatments ($p=0.49$) or systemic therapies ($p=0.87$). **CONCLUSIONS:** In our study population, nearly half of recurrent meningioma patients reported moderate to severe distress. Therefore, even in this benign tumor population, the NCCN-DT and problem list should be administered at every clinic visit.

QOLP-14. PRELIMINARY EXAMINATION OF CONFIRMED GLIOMA RISK FACTORS AMONG EPENDYMOMA PATIENTS IN THE NEURO-ONCOLOGY BRANCH NATURAL HISTORY STUDY (NOB-NHS) AND RISK AND OUTCOMES STUDY (ROS)

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BACKGROUND: The Glioma International Case-Control (GICC) study is the largest study to date examining genetic and environmental risk factors for adult gliomas. Inverse associations have been repeatedly confirmed for allergies, atopic skin diseases, and viral infections. Evaluations of these risk factors specifically for ependymoma has not been completed, due to the rarity compared to other glioma types. Therefore, the purpose of this report is evaluating the associations of these confirmed glioma risk factors with ependymomas. **METHODS:** Adult ependymoma patients ($n=128$) enrolled in the NOB-ROS and NHS completed a risk factor questionnaire adapted from the GICC study via a web-based portal. Survey sections related to history of asthma/allergies, common infectious diseases, and regular antihistamine/anti-inflammatory use were examined. Ependymoma patients exposed to these factors were calculated and compared to control ($n=1,534$) and glioma cases ($n=1,339$) from a published report (Scheurer, 2011). Odds ratios were calculated for ependymoma using the published controls to compare risk factor effects between ependymoma and glioma cases. **RESULTS:** The sample was mostly female (62%), median age=45, white (95%), diagnosed with an ependymoma (52%) in the spine (66%). Ependymoma patients were: less likely to have history of asthma/allergy (41%) than controls (66%; OR 0.36, $p<0.001$); more likely to report regular antihistamine use (23%) than controls (11%; OR 2.38, $p<0.001$) and all glioma cases com-

bined ($p<0.001$); and more likely to report regular anti-inflammatory use than all glioma cases combined ($p=0.02$). **CONCLUSION:** Asthma/allergy effects may be more pronounced among ependymoma cases compared to gliomas overall. However, effects of antihistamines and NSAIDs are MUCH worse in ependymoma cases compared to published effects in all cases. This is the first report in adult ependymoma patients exploring risk factors reported in other gliomas and provides preliminary understanding of potential differences in ependymomas. Further analysis should be explored to identify significant areas of concern.

QOLP-15. SAFETY AND ADVERSE EVENT PROFILE OF TUMOR TREATING FIELDS IN ANAPLASTIC GLIOMA A POST-MARKETING SURVEILLANCE ANALYSIS

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INTRODUCTION: Tumor Treating Fields (TTFields) are approved for glioblastoma (GBM) based on two randomized phase 3 trials. The Optune system non-invasively administers TTFields at 200kHz via transducer arrays placed upon a shaved scalp. Despite advancements in the molecular characterization of anaplastic gliomas (AGs), there remains a paucity of treatment options. While Optune is not FDA-approved for AGs, there are several open clinical trials. To further characterize potential safety risks in AG, post-marketing surveillance data are reported for patients with AGs treated with TTFields. **METHODS:** A review of adverse events in patients with a diagnosis of anaplastic astrocytoma or anaplastic oligodendroglioma treated with TTFields. Post-market surveillance data were analyzed based on the MedDRA body system (system organ class) preferred terms. **RESULTS:** A total of 498 patients with AGs were treated with TTFields in the United States and Europe. Of these, 262 patients (53%) experienced at least 1 adverse event (AE). These included heat sensation in 50 (10%), electric sensation in 36 (7%), headache in 41 (8%) and fatigue in 14 (3%). Skin toxicity was the most common type of AE reported in 152 patients (31%) and included skin reaction (30%), skin ulcer (3%), hyperhidrosis (3%), and rash (<1%). These findings as well as the incidence of other reported AEs were in line with glioblastoma phase 3 trials. **CONCLUSION:** In this retrospective review of available post-marketing surveillance data, there were no unexpected adverse events when TTFields were used in patients with AGs. The incidence of the most common AE, skin reaction, as well as other reported AEs were comparable with rates observed in the EF-11 trial for patients with recurrent GBM, and the EF-14 trial for patients with newly diagnosed GBM. This data supports further investigation on safety and efficacy of TTFields in patients with AGs, and prospective studies are currently planned.

QOLP-16. CAPTURING THE PRIMARY BRAIN TUMOR (PBT) PATIENT'S EXPERIENCE OF BODY IMAGE DISSATISFACTION: REPORT FROM THE NEURO-ONCOLOGY BRANCH-NATURAL HISTORY STUDY (NOB-NHS)

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BACKGROUND: Body image dissatisfaction is associated with difficulty coping and adjustment in patients with other solid tumors. Although PBT patients may be at increased risk due to the visible disfigurement and debilitating nature of the disease, there is limited research in this patient group. The purpose of this report is to present the qualitative analysis of data captured on the NOB-NHS Body Image Study. **METHODS:** 100 patients participated by completing structured questionnaires and open-ended responses. Seventy-two patients provided open-ended feedback exploring, How have the changes affected you? within the Feedback Form. Qualitative analysis software (MAXQDA) allowed for text coding of response data to identify recurrent themes. **RESULTS:** The sample was primarily white (82%), males (58%) median age=50 (range 23–74), diagnosed with glioblastoma (36%). Only 10 (8%) indicated no body image issues. Five dominant themes (lifestyle changes, symptom effects, negative & positive outlook, changes in appearance) characterized participant description of body image since their diagnosis. A number of patients (28%) expressed a hindrance within their lifestyle (altered mobility, independence, activity, and changes in relationships) contributing to this theme. Participants described symptom